RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/828, 559
Source: 17400
Date Processed by STIC: 12-22-04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 12/22/2004

PATENT APPLICATION: US/10/828,559

TIME: 15:34:24

Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

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4 <110> APPLICANT: Punnonen, Juha
 5
         Apt, Doris
 6
         Neighbors, Margaret
 7
         Leong, Steven R.
 9 <120> TITLE OF INVENTION: NOVEL TUMOR-ASSOCIATED ANTIGENS
                                                                    (p5,6)
12 <130> FILE REFERENCE: 0334.210US
14 <140> CURRENT APPLICATION NUMBER: US 10/828,559
15 <141> CURRENT FILING DATE: 2004-04-19
17 <150> PRIOR APPLICATION NUMBER: US 60/464,780
18 <151> PRIOR FILING DATE: 2003-04-22
20 <160> NUMBER OF SEQ ID NOS: 95
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 185
26 <212> TYPE: PRT
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: TAg-25 fragment comprising extra-cellular domain
31
         (ECD)
33 <400> SEQUENCE: 1
34 Arg Ile Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp
36 Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly
37
                                   25
38 Thr Ala Thr Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp
40 Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile
42 Ile Ile Glu Leu Lys His Lys Glu Arg Glu Ser Pro Tyr Asp Ser Lys
                       70
                                           75
44 Ser Leu His Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu
                                       90
46 Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr
47
48 Ile Asp Leu Met Gln Asn Ser Ser Gln Lys Thr Gln Asp Asp Val Asp
49
                               120
50 Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser
                           135
52 Leu Phe His Ser Lys Lys Met Asp Leu Arg Val Asn Gly Glu Leu Leu
54 Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala
                   165
                                       170
56 Pro Glu Phe Ser Met Gln Gly Leu Lys
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RAW SEQUENCE LISTING DATE: 12/22/2004 PATENT APPLICATION: US/10/828,559 TIME: 15:34:24

Input Set : A:\0334.210US-seqlist.txt Output Set: N:\CRF4\12222004\J828559.raw

185

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60 <210> SEQ ID NO: 2
61 <211> LENGTH: 57
62 <212> TYPE: PRT
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: TAg-25 fragment comprising propeptide (PP)
68 <400> SEQUENCE: 2
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71 Val Asn Asn Asn Arg Glu Cys Gln Cys Thr Ser Val Gly Ala Gln Asn
73 Thr Val Ile Cys Ser Lys Leu Ala Ala Lys Cys Leu Val Met Lys Ala
75 Glu Met Asn Gly Ser Lys Leu Gly Arg
       50
76
79 <210> SEQ ID NO: 3
80 <211> LENGTH: 23
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: TAg-25 fragment comprising signal peptide (SP)
87 <400> SEQUENCE: 3
88 Met Ala Pro Pro Gln Ala Leu Ala Leu Gly Leu Leu Ala Ala Ala
89 1
90 Thr Ala Thr Phe Ala Ala Ala
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94 <210> SEQ ID NO: 4
95 <211> LENGTH: 265
96 <212> TYPE: PRT
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: TAg-25 polypeptide (which comprises signal
          peptide+propeptide+ ECD)
101
103 <400> SEQUENCE: 4
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105
106 Thr Ala Thr Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu Asn Tyr
107
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108 Lys Leu Ala Val Asn Cys Phe Val Asn Asn Asn Arg Glu Cys Gln Cys
109
            35
                                40
110 Thr Ser Val Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala
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112 Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg
                                            75
113 65
114 Arg Ile Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp
115
116 Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly
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117
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RAW SEQUENCE LISTING DATE: 12/22/2004
PATENT APPLICATION: US/10/828,559 TIME: 15:34:24

Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

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120	Lys	Asp		Glu	Ile	Thr	Cys 135		Glu	Arg	Val	Arg 140	Thr	Tyr	Trp	Ile	
			Glu	Leu	Lys			Glu	Arg	Glu	Ser		Tyr	Asp	Ser		
	145 Ser	Leu	His	Thr	Ala	150 Leu	Gln	Lys	Glu	Ile	155 Thr	Thr	Arg	Tyr	Gln	160 Leu	
125		_	_	_,	165	_,	_		_	170	~->	_	_	7	175	ml.	
127	_		_	180					185		Glu			190			
128 129	Ile	Asp	Leu 195	Met	Gln	Asn	Ser	Ser 200	Gln	Lys	Thr	Gln	Asp 205	Asp	Val	Asp	
130	Ile	Ala	Asp	Val	Ala	Tyr	Tyr	Phe	Glu	Lys	Asp	Val	Lys	Gly	Glu	Ser	
131		210		_	_	_	215	_	_	_		220	~~		_	_	
			His	Ser	Lys	_	Met	Asp	Leu	Arg	Val 235	Asn	GIY	GIu	Leu	Leu 240	
	225		Δen	Pro	Glv	230	Thr	T. 0 11	Tle	Tvr	Tyr	Val	Asn	Glu	Lvs		
135	лэр	пец	дэр	110	245	GIII	1111	пец	110	250	TYL	vai	Аор	GIU	255	niu	
	Pro	Glu	Phe	Ser	Met	Gln	Gly	Leu	Lys								
137				260			-		265								
140	<210	O> SI	EQ II	ON C	: 5												
141	<21	l> L	ENGTI	I: 24	12									•			
			YPE:														
					Art:	ific:	ial S	Seque	ence								
145	<220)> FI	τατιτ	· 교 C													
							err 25		.								nan-
146	<223	3 > O:	THER	INF		rion:	: TA	g-25	frag	gment	c cor	npri	sing	prop	pept	lde+	ECD
146 148	<223 <40	3 > 0: 0 > SI	THER EQUEI	INFO	5			_		-			_				ECD
146 148 149	<223 <400 Gln	3 > 0: 0 > SI	THER EQUEI	INFO	5			_		-	c cor		_				ECD
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146 148 149 150 151 152	<223 <400 Gln 1 Val	3> O 0> SI Glu Asn	THER EQUEI Glu Asn	INFO NCE: Cys Asn 20	5 Val 5 Arg	Cys Glu	Glu Cys	Asn Gln	Tyr Cys 25	Lys 10 Thr	Leu Ser	Ala Val	Val Gly	Asn Ala 30	Cys 15 Gln	Phe Asn	ECD
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146 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164	<223 <400 Gln 1 Val Thr Glu Leu 65 Leu Asn Ser	3> OT Glu Asn Val Met 50 Gln Phe Thr	THER Glu Asn Ile 35 Asn Asn Lys Ala Arg 115	INFONCE: Cys Asn 20 Cys Gly Asn Ala Gly 100 Val	Val 5 Arg Ser Ser Asp Lys 85 Val	Cys Glu Lys Lys Gly 70 Gln Arg	Glu Cys Leu Leu 55 Leu Cys Arg	Asn Gln Ala 40 Gly Tyr Asn Thr	Tyr Cys 25 Ala Arg Asp Gly Asp 105 Ile	Lys 10 Thr Lys Arg Pro Thr 90 Lys	Leu Ser Cys Ile Asp 75 Ala Asp	Ala Val Leu Lys 60 Cys Thr Thr	Val Gly Val 45 Pro Asp Cys Glu Leu 125	Asn Ala 30 Met Glu Glu Trp Ile 110 Lys	Cys 15 Gln Lys Gly Ser Cys 95 Thr	Phe Asn Ala Ala Gly 80 Val Cys Lys	ECD
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RAW SEQUENCE LISTING

DATE: 12/22/2004 TIME: 15:34:24

PATENT APPLICATION: US/10/828,559

Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

171 Ser Gln Lys Thr Gln Asp Asp Val Asp Ile Ala Asp Val Ala Tyr Tyr 185 180 173 Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His Ser Lys Lys Met 175 Asp Leu Arq Val Asn Gly Glu Leu Leu Asp Leu Asp Pro Gly Gln Thr 210 215 177 Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe Ser Met Gln Gly 230 178 225 179 Leu Lys 183 <210> SEQ ID NO: 6 184 <211> LENGTH: 314 185 <212> TYPE: PRT 186 <213> ORGANISM: Artificial Sequence 188 <220> FEATURE: 189 <223> OTHER INFORMATION: TAg-25 full-length/membrane-bound form, which comprises N- to C-terminus signal peptide+propeptide+ECD+TMD+CD 191 193 <400> SEQUENCE: 6 194 Met Ala Pro Pro Gln Ala Leu Ala Leu Gly Leu Leu Leu Ala Ala Ala 195 1 196 Thr Ala Thr Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu Asn Tyr 20 25 198 Lys Leu Ala Val Asn Cys Phe Val Asn Asn Asn Arg Glu Cys Gln Cys 35 200 Thr Ser Val Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala 55 202 Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg 204 Arg Ile Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp 206 Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly 207 100 208 Thr Ala Thr Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp 120 115 210 Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile 135 212 Ile Ile Glu Leu Lys His Lys Glu Arg Glu Ser Pro Tyr Asp Ser Lys 155 150 214 Ser Leu His Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu 170 165 216 Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr 180 185 218 Ile Asp Leu Met Gln Asn Ser Ser Gln Lys Thr Gln Asp Asp Val Asp 200 220 Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser 215 222 Leu Phe His Ser Lys Lys Met Asp Leu Arg Val Asn Gly Glu Leu Leu 224 Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala

RAW SEQUENCE LISTING DATE: 12/22/2004
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Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

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226 Pro Glu Phe Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile
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               260
228 Val Val Val Met Ala Val Val Ala Gly Ile Val Val Leu Val Ile
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     275
230 Ser Arg Lys Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu
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                           295
       290
232 Met Gly Glu Met His Arg Glu Leu Asn Ala
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236 <210> SEQ ID NO: 7
237 <211> LENGTH: 234
238 <212> TYPE: PRT
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Mature Tag-25 polypeptide, which comprises N- to
          C-terminus ECD+TMD+CD
245 <220> FEATURE:
246 <221> NAME/KEY: DOMAIN
247 <222> LOCATION: (186)...(208)
248 <223> OTHER INFORMATION: Transmembrane domain (TMD)
250 <400> SEQUENCE: 7
251 Arg Ile Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp
253 Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly
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                20
255 Thr Ala Thr Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp
           35
257 Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile
      50
259 Ile Ile Glu Leu Lys His Lys Glu Arg Glu Ser Pro Tyr Asp Ser Lys
261 Ser Leu His Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu
                    85
263 Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr
                                    105
               100
265 Ile Asp Leu Met Gln Asn Ser Ser Gln Lys Thr Gln Asp Asp Val Asp
                                120
           115
267 Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser
        130
                            135
269 Leu Phe His Ser Lys Lys Met Asp Leu Arg Val Asn Gly Glu Leu Leu
                        150
                                            155
271 Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala
                                        170
273 Pro Glu Phe Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile
                                    185
                180
275 Val Val Val Met Ala Val Val Ala Gly Ile Val Val Leu Val Ile
            195
277 Ser Arg Lys Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/22/2004 PATENT APPLICATION: US/10/828,559 TIME: 15:34:25

Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:82; Xaa Pos. 2,3,14,16,17,19,20,21,22,28,30,47,48,51
Seg#:83; Xaa Pos. 3,5,6,9,15,16,20
Seq#:84; Xaa Pos. 2,4,5,6,7,8,9,10,11,13,14,15,16,17,18,19,21,23,24,25,26
Seq#:84; Xaa Pos. 27,28,29,30,31,32
Seq#:85; Xaa Pos. 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:85; Xaa Pos. 24,25,26,27,28,29,30,31,32,33,35,36,37,38,39,40,41,42,43
Seq#:85; Xaa Pos. 44,46,47,48,49,50,52,54,55,56,57,58,59,60,61,62,63,64,65
Seq#:85; Xaa Pos. 66,67,68,69
Seq#:86; Xaa Pos. 11,13,14,15,16,17,18,19,21,23,24,25,26,27,28,29,30,31,32
Seq#:87; Xaa Pos. 2,3,4,5,6,7,8,9,10,11,12,13,14,17,18,19,20,21,22,23,42,43
Seq#:87; Xaa Pos. 44,46,47,48,58,59,60,61,62,63,64,65,66,67,68,69
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Seq#:88; Xaa Pos. 107,108
Seq#:89; Xaa Pos. 11,13,14,15,16,17,18,19,21,23,24,25,26,27,28,29,30,31,32
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Seq#:89; Xaa Pos. 102,103,104,105,106,107,108
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Seq#:91; Xaa Pos. 68,69,70
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/828,559

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Input Set : A:\0334.210US-seqlist.txt
Output Set: N:\CRF4\12222004\J828559.raw

L:1902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0 M:341 Repeated in SeqNo=81 L:1927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0 M:341 Repeated in SeqNo=82 L:1951 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0 M:341 Repeated in SeqNo=83 L:1971 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0 M:341 Repeated in SeqNo=84 L:1993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0 M:341 Repeated in SeqNo=85 L:2019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:0 M:341 Repeated in SeqNo=86 L:2047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:0 M:341 Repeated in SeqNo=87 L:2073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:0 M:341 Repeated in SeqNo=88 L:2108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0 M:341 Repeated in SeqNo=89 L:2143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90 after pos.:0 M:341 Repeated in SeqNo=90 L:2168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:0 M:341 Repeated in SeqNo=91